# SCHEDULE OF PROPOSAL ITEMS

| ITEM<br>NO | DESCRIPTION                            | UNIT     | QUANTI      |
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# GENERAL NOTES

### CRITERIA

THE CONTRACTOR SHALL BE GOVERNED BY THE STANDARDS AND REQUIREMENTS OF THE FOLLOWING PUBLICATIONS. EXCEPT AS MODIFIED BY THE SPECIAL PROVISIONS OF THIS CONTRACT.

#### <u>DESIGN</u>

MDSHA - "MARYLAND MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES", 2006 EDITION AND SUBSEQUENT REVISIONS. (MD M.U.T.C.D.)

A A S H T O - "HIGHWAY SAFETY DESIGN AND OPERATIONS GUIDE" -1997

A A S H T O - "STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS LUMINAIRES AND TRAFFIC SIGNALS, 2001 EDITION (CATEGORY II FOR ALL OVERHEAD AND CANTILEVER SIGN STRUCTURES).

#### MATERIALS AND CONSTRUCTION

MARYLAND STATE HIGHWAY ADMINISTRATION - "STANDARD SPECIFICATIONS FOR CONSTRUCTION & MATERIALS', 2001 EDITION AND SUBSEQUENT SUPPLEMENTS.

### DESIGN WIND

100 MPH - WOOD SUPPORTS 10 YEAR RECURRENCE INTERVAL

100 MPH - GROUND MOUNT SIGN STEEL SUPPORTS 10 YEAR RECURRENCE INTERVAL

ALL DISTRICTS

B) PANELS.

B) PANELS

MATERIAL - EXTRUDED ALUMINUM

MATERIAL - SHEET ALUMINUM

COPY - NON-DEMOUNTABLE

EXISTING SIGNS)

1) BUTTON REFLECTOR (REVISIONS TO

REVISIONS TO EXISTING SIGNS)

2) HIGH INTENSITY (NEW SIGNS AND

COPY - DEMOUNTABLE

100 MPH - OVERHEAD AND CANTILEVER STRUCTURES 50 YEAR RECURRENCE INTERVAL

## DESIGN STRESS

SOIL BEARING PRESSURE - S = 3.000 P.S.F. (ASSUMED) SEE MATERIAL & CONSTRUCTION ABOVE AND SPECIAL PROVISIONS FOR DESIGN STRESSES FOR STRUCTURAL STEEL, ALUMINUM, REINFORCING STEEL AND CONCRETE.

#### CHAMFER

ALL EXPOSED EDGES OF CONCRETE SHALL HAVE A 3/4" X 3/4" CHAMFEI

#### CLASSIFICATION OF SIGNS

SIGNS ARE DIVIDED INTO TWO (2) GENERAL CATEGORIES.

1 GUIDE SIGNS

A) STRUCTURAL TYPES

OH - OVERHEAD

A) STRUCTURAL TYPES

C - CANTILEVER

GM - GROUND MOUNT, BREAKAWAY OR NON-BREAKWAY

BM - BRIDGE MOUNTED

2 STANDARD SIGNS (REGULATORY, WARNING, ETC.)

WOOD SUPPORTS

GALVANIZED STEEL 'U' CHANNEL

# IDENTIFICATION OF SIGNS AND PANELS

#### GUIDE SIGNS

EACH GUIDE SIGN IS IDENTIFIED BY A SIGN NUMBER ON THE PLANS AND IN THE TABULATIONS. PANELS ON GUIDE SIGNS ARE IDENTIFIED WITH A NUMBER AND WHERE VARIATIONS OCCUR, A LOWER CASE LETTER.

#### STANDARD SIGNS

STANDARD SIGNS ARE IDENTIFIED BY PANEL NUMBERS AND ARE CLASSIFIED AS FOLLOWS

- R REGULATORY
- W WARNING M - ROUTE MARKERS AND ACCESSORIES
- D DESTINATION AND MILEAGE PANELS
- S SCHOOL

PANELS SHALL BE DESIGNATED TO AGREE WITH MARYLAND STANDARD SIGN BOOK.

## PANEL LAYOUT AND ALPHABETS

1. GUIDE SIGN PANEL LAYOUTS ARE BASED ON THE A.A.S.H.T.O. MANUALS NOTED ABOVE. 2. STANDARD SIGN PANEL LAYOUTS ARE BASED ON THE M.U.T.C.D. WITH SPECIFICATIONS DETAILED IN THE MARYLAND STATE HIGHWAY ADMINISTRATION PUBLICATION, "STANDARD SIGN BOOK". AVAILABLE THROUGH THE SHA CASHIER'S OFFICE.

#### REFLECTORIZATION

BACKGROUNDS, BORDERS, TEXTS AND ALL OTHER ELEMENTS OF SIGN PANELS SHALL BE REFLECTORIZED EXCEPT WHERE NOTED.

### SIGN LOCATIONS

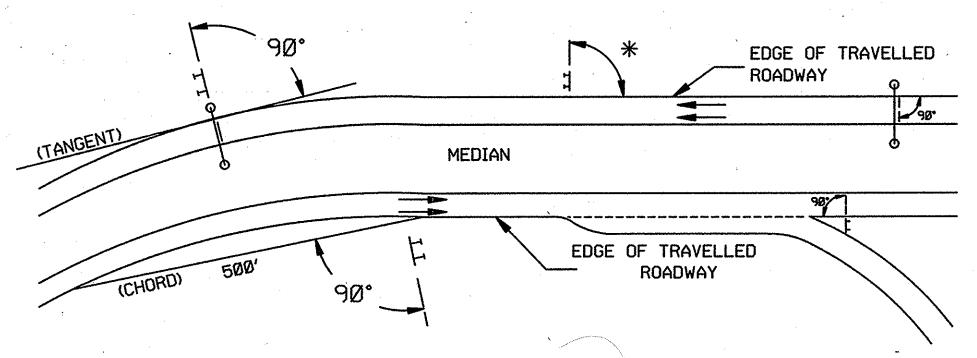
1. GUIDE SIGNS ARE LOCATED ON THE PLANS BY DIMENSION TO SURVEY STATIONS, OR WHEN NECESSARY, TO IDENTIFIABLE PHYSICAL FEATURES.

2. ALL CHANGES IN THE LOCATIONS OF SIGNS AS SHOWN ON THE PLAN SHALL HAVE THE PRIOR APPROVAL OF THE ENGINEER.

## EXISTING UTILITIES

THE ENGINEER DOES NOT WARRANT OR GUARANTEE THE ACCURACY OR COMPLETENESS OF UTILITY INFORMATION SHOWN ON THE PLAN. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO LOCATE AND PROTECT ALL EXISTING FACILITIES WHICH MIGHT BE AFFECTED BY THIS WORK OR HIS OPERATION.

# ORIENTATION OF SIGN FACES



 $m{st}$  under 30 feet from travelled roadway to near edge of Sign - 93° to avoid SPECULAR REFLECTION AS INDICATED IN 813.03 OF THE MARYLAND STANDARD SPECIFICATIONS FOR CONSTRUCTION AND MATERIALS.

OVER 30 FEET FROM TRAVELLED ROADWAY TO NEAR EDGE OF SIGN - 90°

## ROADSIDE SIGNS

1. VERTICAL ALIGNMENT

POSITION PANEL SO FACE IS PLUMB.

2. HORIZONTAL ALIGNMENT (SEE DIAGRAM ABOVE) A), ON STRAIGHT ROADWAY SECTIONS, ANGLE OF SIGN FACE TO ROADWAY VARIES WITH

DISTANCE FROM TRAVELLED ROADWAY TO NEAR EDGE OF SIGN - SEE DIAGRAM. B). ON THE INSIDE OF HORIZONTAL CURVES, POSITION SIGN SO FACE OF PANEL MAKES AN ANGLE OF 90° WITH A CHORD BETWEEN A POINT ON NEAR EDGE OF PAVEMENT AT SIGN LOCATION AND A POINT ON EDGE OF PAVEMENT 500' IN ADVANCE OF SIGN

C). ON THE OUTSIDE OF HORIZONTAL CURVES, POSITION SIGN SO FACE OF PANEL IS AT RIGHT ANGLES TO THE TANGENT OF THE CURVE AT THE SIGN LOCATION.

D.) POSITIONING OF SIGNS AT GORES AND RAMP SEPARATIONS IS REFERRED TO THE NORMAL EDGE OF THE MAINLINE ROADWAY.

#### OVERHEAD SIGNS

1. VERTICAL ALIGNMENT

POSITION PANELS FOR ALL OVERHEAD STRUCTURES SO THAT PANEL FACE IS PLUMB.

2. OVERHEAD SIGN STRUCTURES SHALL NOT BE ERECTED WITHOUT ATTACHING LUMINARIES SUPPORTS AND/OR SIGN.

3. HORIZONTAL ALIGNMENT

A). POSITION ALL OVERHEAD SIGNS SO THAT THE FACE OF THE PANEL IS AT RIGHT ANGLES

TO THE NORMAL EDGE OF ROADWAY, IF ON A STRAIGHT ROADWAY SECTION. B). POSITION ALL OVERHEAD SIGNS SO THAT THE FACE OF THE PANEL IS AT RIGHT ANGLES

TO THE TANGENT OF THE CURVE AT SIGN LOCATION, IF ON A HORIZONTAL CURVE. C). POSITIONING OF SIGNS AT GORES AND RAMP SEPARATIONS IS REFERRED TO THE NORMAL EDGE OF THE MAINLINE ROADWAY

4. VERTICAL CLEARANCE

A). OVERHEAD SIGNS SHALL HAVE A MINIMUM VERTICAL CLEARANCE OF 17'-9" FROM ROADWAY TO THE BOTTOM OF LIGHT FIXTURES. ALL LIGHT FIXTURES ARE TO BE AT THE SAME ELEVATION ONLY ON AESTHETIC STRUCTURES.

B). IF THE CONTRACTOR CANNOT OBTAIN 17'-9" (SEE 3A) CLEARANCE, HE IS TO CEASE WORK AND CONTACT THE PROJECT ENGINEER FOR FURTHER INSTRUCTIONS. THE PROJECT ENGINEER MAY CONTACT THE TRAFFIC ENGINEERING DIVISION FOR ASSISTANCE.

C). ON UNLIT OVERHEAD SIGNS. THE MINIMUM CLEARANCE TO BOTTOM OF SIGN: 20'-9".

### PROJECT REQUIREMENTS

1. ALL NEW SIGNS ON THIS PROJECT ARE TO HAVE NON-REFLECTIVE (BLACK COPY) OR HIGH-INTENSITY REFLECTIVE (ALL OTHER COLORS) SHEETING BACKGROUND AND COPY. REFLECTIVE SHEETING SHALL BE TYPE III ENCAPSULATED LENS REFLECTIVE ELEMENT MATERIAL.

2. ALL NEW EXTRUDED ALUMINUM PANELS ARE TO HAVE DEMOUNTABLE COPY.

3. ALL NEW SHEET ALUMINUM SIGNS ARE TO HAVE NON-DEMOUNTABLE COPY.

4. THE FOLLOWING MINIMUM THICKNESS SHALL BE USED FOR THE APPROPRIATE WIDTH OF SHEET ALUMINUM BLANKS.

| MINIMUM THICKNESS |
|-------------------|
| Ø <b>.</b> 040'   |
| Ø <b>.</b> Ø63*   |
| Ø.Ø8Ø*            |
| Ø.1ØØ*            |
| Ø.125 <b>'</b>    |
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STATE OF MARYLAND DEPARTMENT OF TRANSPORTATION STATE HIGHWAY ADMINISTRATION **CFFICE OF TRAFFIC & SAFETY** 

TRAFFIC ENGINEERING DESIGN DIVISION MD 2 (SOLOMONS ISLAND ROAD) @ FRIENDSHIP / SANSBURY ROAD ROUNDABOUT

| APPROVALS  | REVISIONS                                   | GENERAL NOTES AND PROPOSALS  |  |  |
|--|---|--|--|--|
| Din Model 3-12-01  |   | SCALE NTS DATE 3/7/07 CONTRACT NO. AA3645176   |  |  |
| Chul Like 3-12-07 ASSTODIV. CHIEF Chul Like 3-12-07 DIVISION CHIEF |   | DESIGNED BY         FAE         COUNTY         ANNE ARUNDEL           DRAWN BY         FAE         LOGMILE         1.13 TO 1.31           CHECKED BY         MJA         BFVO         T.I.M.S. NO.         H477           F.A.P. NO.         AC-STP-1189(6)E         TOD NO. |  |  |
| OFFICE DIRECTOR  |   | DRAWING NO. SN-1 OF SHEET NO. 23 OF 33   |  |  |
|  | PLOTTED: Monday, March 05, 2007 AT 05:18 PM |  |  |  |

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